
NAVFAC IGS-09205 (JULY 2002)

Supercedes IGS-09205 (05/02)
Preparing Activity: LANTNAVFACENGCOM Based on UFGS-09205N

ITALIAN GUIDE SPECIFICATIONS

Use for ITALIAN projects only

SECTION 09205

FURRING AND LATHING
07/02

NOTE: This guide specification is issued by the Atlantic Division, Naval Facilities Engineering Command for regional use in Italy.

NOTE: This guide specification covers lathing requirements for gypsum and portland cement-based plaster work. Metal framing, furring and ceiling suspension systems for lathing are specified in Section 05400, "Cold-Formed Metal Framing" and Section 09100 "Metal Support Assemblies."

Note: Some geographic areas in Western Division are experiencing discoloration of exterior plaster work along the lines of the framing system used to support the lath (metal framing in particular and wood framing to a lesser extent). Where this problem is occurring or anticipated, design the exterior wall with a thermal break between the metal lath and the framing members. One suggested solution is to install 12.7 mm thick gypsum sheathing board, conforming to ASTM C 79, "Gypsum Sheathing Board," on the framing members before attaching the metal lath.

NOTE: In Europe, plaster (gypsum and cement) is usually installed directly to the masonry (hollow clay block or concrete block). This sometimes results in cracking, however, not as much with the clay block as with the concrete because of the high rate of shrinkage typical of concrete block. Metal lath is recommended for most projects to avoid cracking and the resulting maintenance costs. As a consequence of limited use, very little technical

information and no technical norms have been found. Specify products by name and stipulate technical requirements and characteristics must be indicated on the drawings, including, fastening, intersection details, etc.

The word "stucco" has a specific meaning in Italian (referring to a finish coat). The term cement plaster is preferred to avoid confusion.

NOTE: On the drawings, show:

1. Location and extent of plastering
2. Type(s) and spacing of supports
3. Type(s) of plaster and location
4. Control joint locations
5. Fire resistance rating(s), where applicable
6. Sound transmission class (STC) rating(s), where applicable
7. Location and size of access panels and fabrication details for access panels larger than 600 by 900 mm.

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Comments and suggestion on this specification are welcome and should be directed to the technical proponent of the specification. A listing of the technical proponents, including their organization designation and telephone number, is on the Internet.

Use of electronic communication is encouraged.

Brackets are used in the text to indicate designer choices or locations where text must be supplied by the designer.

PART 1 GENERAL

1.1 REFERENCES

The publications listed below form a part of this specification to the extent referenced. The publications are referred to in the text by the basic designation only.

EUROPEAN COMMITTEE FOR STANDARDIZATION (CEN)

CEN EN 10142

(2001) Continuously Hot Dip Zinc Coated
Low Carbon Steels Strip and Sheet for
Cold Forming - Technical Delivery
Conditions

1.2 SUBMITTALS

NOTE: Submittals must be limited to those necessary for adequate quality control. The importance of an item in the project should be one of the primary factors in determining if a submittal for the item is required.

A "G" following a submittal item indicates that the submittal requires Government approval. Some submittals are already marked with a "G". Only delete an existing "G" if the submittal item is not complex and can be reviewed through the Contractor's Quality Control system. Only add a "G" if the submittal is sufficiently important or complex in context of the project.

For submittals requiring Government approval on Army projects, a code of up to three characters within the submittal tags may be used following the "G" designation to indicate the approving authority. Recommended codes for Army projects are "RE" for Resident Engineer approval, "ED" for Engineering approval, and "AE" for Architect-Engineer approval. Codes following the "G" typically are not used for Navy projects.

Submittal items not designated with a "G" are considered as being for information only for Army projects and for Contractor Quality Control approval for Navy projects.

Submit the following in accordance with Section 01330, "Submittal Procedures."

SD-02 Manufacturer's Catalog Data

Lath

Accessories

Access panels

1.3 DELIVERY AND STORAGE

Deliver materials in the manufacturer's original unbroken packages or containers that are labeled plainly with the manufacturer's names and brands. Store materials in dry locations with adequate ventilation, free from water, and in such a manner to permit easy access for inspection and handling. [Stack gypsum lath flat to avoid sagging or damage to edges, ends, or surfaces, and protect from exposure to direct sunlight.]

PART 2 PRODUCTS

NOTE: This guide specification presents nonproprietary materials. When the guide specification is edited or supplemented to suit project requirements, care shall be exercised to present a project specification section which contains no proprietary materials.

2.1 LATH

2.1.1 Metal Plastering Base (Lath)

CEN EN 10142 Provide zinc coated plastering base of the type(s) and weight(s) required for the type and spacing of supports shown for the kind of plaster indicated and specified. Do not use rib lath for porcelain or ceramic tile scratch coat.

2.1.1.1 For Portland Cement-Based Plaster

[Diamond mesh] [self-furring diamond mesh] [flat rib] [10 mm rib] [20 mm rib] [sheet] [welded wire] [woven wire] metal lath weighing not less than [1.4] [1.5] [1.8] [2.1] [2.4] [2.9] [_____] kilograms per square meter.

2.1.1.2 For Gypsum Plaster

NOTE: Consult Table 2 in ASTM C 1063 and Table 1 in ASTM C 841 to determine the type and weight of the metal lath based on the type and spacing of the support system shown on the project drawings.

[Diamond mesh] [self-furring diamond mesh] [flat rib] [10 mm rib] [20 mm rib] [sheet] [welded wire] [woven wire] metal lath weighing not less than [1.4] [1.5] [1.8] [2.1] [2.4] [2.9] [_____] kilograms per square meter.

2.1.1.3 Paper Backing (Waterproofed Kraft Building Paper)

NOTE: Specify "Moderate water-vapor Resistant" where moisture protection or use of vapor barrier is required. Specify "Water-vapor permeable" to maintain hollow partitions plaster free, to prevent

plaster from bonding to substrate, to prevent over spray where plaster is sprayed on, to provide uniform plaster thickness and to improve bonding (keying). Edit paragraph as required.

Provide metal plastering base with paper backing, "Moderate water-vapor Resistant" [for room(s) [____]] ["Water-vapor permeable"] [for room(s) [____]] [and] [for exterior plastering work].

2.1.1.4 Galvanized Metal Plastering Base

NOTE: Specify galvanized metal plastering base for all exterior plastering and for plastering interior areas subject to high moisture conditions such as natatoriums and shower and laundry rooms.

Provide [for exterior plastering work] [and] [for plastering room(s) [____]] [in all locations].

2.1.1.5 Acceptable Products

The following manufacturers produce products that meet the requirements of this specification:

Ferracciaio, S.r.l.
Via Luzzatti, 7
20133 Milano
Tel: 02/23 65 405
Fax: 02/26 64 206

Actis Furo, S.r.l.
Via Valbrona, 3
10125 Mikano
Tel: 02/64 35 751
Fax: 02/66 100 186

Fratelli Mariani, S.p.a.
Corso Buenos Aires, 65
20124 Milano
Tel: 02/294 049 57
Fax: 02/204 9547

2.1.2 Gypsum Lath

NOTE: Specify only for interior gypsum plastering work in relatively large, flat areas. Do not use for curved areas or areas subject to high moisture conditions. The use of gypsum board is relatively new technology in southern Europe. The use of gypsum board as a substrate for plaster is virtually

undocumented in the product literature. However, the board is available and, with sufficient detailing, is an option. Refer to product literature and specify which particular board is required.

Provide [plain] [(fire resistant)] [foil-backed] gypsum lath [9.53] [12.70] mm thick.

2.1.2.1 Acceptable Products

The following manufacturers offer products meeting the requirements of this specification:

Knauf Italia
31050 Villorba (TV)
Tel: 0422/91 9876
Fax: 0422/91 0301

Lafargessi, S.p.a.
Largo Lorenzo Mossa, 8
00165 Roma
Tel: 06/66 36 041
Fax: 06/63 89 0224

Placo
Via Castel Morrone, 18
20129 Milano (MI)
Tel: 02/294 04 038
Fax: 02/204 6527

2.1.3 Accessories

NOTE: Referenced ASTM standards permit accessories fabricated from:

1. ASTM C 1063:
 - zinc coated (galvanized) steel
 - zinc alloy
 - rigid poly (vinyl chloride) (PVC) plastic

2. ASTM C 841:
 - zinc coated (galvanized) steel
 - paint coated steel
 - rigid poly (vinyl chloride) (PVC) plastic
 - clear plastic coated aluminum

If no exceptions are specified, these materials become Contractor options. Include the last sentence, appropriately edited, to exclude any

undesirable options.

[Provide only [galvanized steel] [zinc alloy] [rigid poly (vinyl chloride) (PVC) plastic] [clear plastic coated aluminum] accessories.]

2.1.3.1 Acceptable Products

The following manufacturers offer products meeting the requirements of this specification:

Knauf Italia
31050 Villorba (TV)
Tel: 0422/91 9876
Fax: 0422/91 0301

Banti, s.n.c.
Via Kennedy, 31
20090 Rodano (MI)
Tel: 02/95 32 83 55
Fax: 02/95 32 13 01

Protektorwerk
Florenz Maisch GmbH
Postfach 1420
D-7560 Gaggenau (Germany)
Tel: 07225/682 0
Fax: 07225/682 175

2.2 ACCESS PANELS

NOTE: Detail fabrication of access panels larger than 600 by 900 mm on project drawings.

Prefabricated steel units, size(s) [as indicated] [[_____] by [_____] mm]. Fabricate frame of preformed angle or channel with welded joints. Perforate wide leg or flange of frame section or extend frame section into expanded metal wings to provide a key for the plaster. Cover shall be hinged or snap-on type with turn-latch or spring catch. [Access panels [for room(s) [_____] shall be provided with a means for locking.] Fabricate access panels not larger than 600 by 900 mm from 1.8 mm thick steel with frames not lighter than 1.5 mm thick. Fabricate access panels larger than 600 by 900 mm as indicated. Factory-prime panels with rust-inhibitive paint.

PART 3 EXECUTION

3.1 INSPECTION

Verify that framing, furring and accessories are securely attached and of proper sizes and spacing necessary to provide a suitable substrate to receive lath. Do not proceed with work until framing, furring and

accessories are acceptable to the Contracting Officer for application of lath.

3.2 INSTALLATION

NOTE: While metal lathing is sometimes omitted where plaster is applied directly to a concrete or masonry substrate, it is required at the place where two dissimilar materials adjoin.

3.2.1 Lathing Materials and Accessories

Install in accordance with drawings and manufacturer's standard details for portland cement-based plaster work [and] [for gypsum plaster work], except where indicated or specified otherwise herein.

3.2.1.1 Metal Plastering Base

Install [where indicated] [on wood or metal studding, furring, joists, rafters, and similar framing members for plastered walls, partitions, ceilings, and soffits] [to receive scratch coat for ceramic tile or terrazzo work] [on [concrete] [and] [masonry] surfaces to receive plaster].

3.2.1.2 Metal Plaster Base with Paper Backing

Where used, lap joints to provide backing on backing and metal-on-metal. Lap backing not less than 25 mm. Lap backing so that water will flow to the exterior.

3.2.1.3 Gypsum Lath

Install [where indicated] [on wood or metal studding, furring, joists, rafters and similar framing members for plastered walls, partitions, ceilings, and soffits].

3.2.1.4 Control (Expansion and Contraction) Joints

- a. For portland cement-based plaster (ceilings and walls), install to create panels no larger than 10 square meters with no dimension exceeding 3150 mm.
- b. For unrestrained gypsum plaster ceilings install to create panels no larger than 250 square meters with no dimension exceeding 15800 mm. For gypsum plaster walls, partitions and ceilings without perimeter relief install not more than 9000 mm on centers in either direction.
- c. Install [where indicated,] where expansion joints occur in the structural walls and ceilings and where ceiling framing or furring changes direction. Terminate lath at each side of joint and fasten joints securely to lath.

3.2.1.5 Unrestrained Ceilings

Furred or suspended ceilings constructed with [gypsum plaster and larger than 250 square meters in area or with any dimension exceeding 15,800 mm] [or] [portland cement-based plaster] shall be unrestrained. Isolate ceiling lath and plaster from ceiling intersecting vertical surfaces with casing beads, control joints, or similar devices designed to keep the ceiling isolated from the adjacent vertical surfaces (walls, partitions, beams, and columns). Do not use corner reinforcement at the internal angle between the ceiling and the vertical surfaces.

3.2.1.6 Plastering Beads

Install edge trim (casing bead) [at the edges of plaster which abuts or adjoins an unplastered surface,] [on each surface at the internal angle formed by load bearing and non-load bearing walls and partitions abutting structural walls, columns, or floor-ceiling slabs,] [between concrete or terrazzo bases and the plaster above them,] [on each side of the joint between walls or partitions constructed of dissimilar materials which require plastering,] [and between plasters of a different composition]. Fill voids formed in corners with sealant. Install corner beads at all vertical external corners of plaster walls.

3.2.2 Fire-Resistant Assemblies

NOTE: Coordinate with the preparer of the project drawings to ensure that fire rating number(s) are indicated on the drawings for fire resistant construction.

Wherever fire-resistant construction is indicated, provide all materials and application methods, including types and spacing of fasteners, in accordance with the assembly as tested.

3.2.3 Access Panels

NOTE: Project drawings or specifications shall assure that the exact number and location of access panels can be easily determined. This information should be shown on the drawings. Coordinate with mechanical and electrical work to ensure adequate access to mechanical and electrical systems. Access panels shall not be installed in fire rated walls or ceilings unless approved by the Engineering Field Division's Fire Protection Engineer.

Install in suspended ceilings and plastered walls to gain working access to mechanical and electrical equipment including valves and junction boxes, at locations [indicated and required by code] [and] [specified in Section _____, "_____"].

-- End of Section --